Amendments to the Drawings:

The attached sheets of drawings include changes to Figures 1-3. In Figures 1-3, "prior art" has been inserted, as required in the office action.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

The office action mailed April 21, 2006, has been carefully reviewed and these remarks are responsive to that office action. Reconsideration and allowance of this application are respectfully requested.

The drawings and written description have been amended to indicate that Figures 1-3 are directed to prior art, as required by paragraph 2 of the office action.

As required by paragraph 4 of the office action, the written description has been amended to indicate that U.S. Patent Application Ser. No. 10/157,968, titled "Support for Real-Time Queries Concerning Current State, Data and History of a Process" and filed on May 31, 2002, which is mentioned in paragraphs 22 and 24, was published with Publication No. US-2003-0225769-A1 on 12/04/2003.

As required by paragraph 6 of the office action, applicant is submitting a copy of each of the following references: Inside Microsoft® SQL SERVER™ 2000 by Karen Delaney (2001 Microsoft Press); and Microsoft® SQL SERVER™ 2000 Books Online, available at <http://www.microsoft.com/sql/techinfo/ productdoc/2000/>.

Claims 1-49 remain in this application.

Claims 1-49 were rejected under 35 U.S.C. 101 for being directed to non-statutory subject matter.

On page 6, the Office Action alleges that the invention claimed in claim 1 is directed to non-statutory subject matter because the claim is directed to "software per se." Applicant traverses the non-statutory subject-matter rejection of claim 1 because this claim is directed to a method for maintaining information regarding multiple instances of an activity, each instance having an active condition in which information about the instance is to be modified or an inactive condition in which information about the instance is not to be modified, the method comprising: creating a record in a first database table for each of the multiple instances in the active condition ... deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition; and creating, for records deleted from the first table, a corresponding record in a second database table. As such, claim 1 recites a method, and not software, in which records for instances in the active condition are stored in a first database

table and records for instances in the inactive condition are deleted from the first database table and are then stored in the second database table. Claim 1, therefore, produces a useful, concrete, and tangible result, namely, maintaining information regarding multiple instances of an activity by storing records to be modified in a first database table and records not to be modified in a second database table.

Similarly, claim 23 is directed to a computer-readable medium having stored thereon data representing sequences of instructions which, when executed by a processor, cause the processor to produce a useful, concrete, and tangible result, namely, creating a record in a first database table for each of multiple instances of an activity for which information is to be modified, deleting from the first table records of instances for which information is not to be modified, and creating, for records deleted from the first table, a corresponding record in a second database table.

Claim 45 is directed to a data processing apparatus for maintaining information regarding multiple instances of an activity thereby producing a useful, concrete, and tangible result, namely, the data processing apparatus creates a record in a first database table for each of multiple instances of an activity for which information is to be modified, deletes from the first table records of instances for which information is not to be modified, and creates, for records deleted from the first table, a corresponding record in a second database table.

Claim 47 is directed to a method for incrementally generating analysis data for instances of an activity. The method produces a useful, concrete, and tangible result, namely, generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances for which information is to be modified and generating a second OLAP cube by processing an initial collection of database records associated with instances for which information is not to be modified.

In response to the provisional nonstatutory double patenting rejection of claims 1, 23, 45, and 47, applicant plans to submit a terminal disclaimer if, and when, the claims of co-pending application 10/670,561 are allowed.

Claims 1-19 and 23-41 were rejected under 35 U.S.C. 102(a) as being anticipated by Bello et al., (U.S. Patent 6,477,525). Claims 47-49 were rejected under 35 U.S.C. 102(e) as

being anticipated by Colossi et al. (U.S. Publication 2004/0139061). Claims 20-22, 42-44, and 46 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bello in view of Colossi.

Bello does not establish prima facie anticipation of claim 1 because Bello does not disclose "each instance having an active condition in which information about the instance is to be modified or an inactive condition in which information about the instance is not to be modified, ... creating a record in a first database table for each of the multiple instances in the active condition, ... deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition; and creating, for records deleted from the first table, a corresponding record in a second database table."

Claim 1 is directed to a method for maintaining information regarding multiple instances of an activity, each instance having an active condition in which information about the instance is to be modified or an inactive condition in which information about the instance is not to be modified, the method comprising: creating a record in a first database table for each of the multiple instances in the active condition, each record containing a field for each of a plurality of data types, one or more of the fields in each active instance record having a value indicative of the active condition; assigning, for records of the multiple instances in the inactive condition, values to the one or more fields indicative of the inactive condition; deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition; and creating, for records deleted from the first table, a corresponding record in a second database table.

Bello is directed to rewriting a query in terms of a summary based on one-to-one and one-to-many losslessness of joins. On page 12, the office action cites col. 15, lines 18-22 in support of the assertion that Bello teaches "deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition." But the cited portion of Bello, which is reproduced below, is directed to rewriting a query to remove duplicate common section rows from a materialized view, as opposed to deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition:

> If the materialized view contains duplicate rows from the common section, a query rewritten to access the materialized view typically has to be rewritten in a

way that requires an additional step of removing duplicate common section rows from the materialized view.

Bello does not disclose, teach, or suggest that the duplicate common section rows are records of instances having values in the one or more fields indicative of the inactive condition.

Bello also does not disclose "creating, for records deleted from the first table, a corresponding record in a second database table." The office action cites column 16, lines 25-30, in support of the assertion that Bello contains such a teaching. This cited portion of Bello is directed to using a "DISTINCT" operation to eliminate the effect of duplicate child-side rows when a join between the common section and the materialized view delta is one-to-many. As such, column 16, lines 25-30, does not disclose, teach, or suggest "creating, for records deleted from the first table, a corresponding record in a second database table."

For at least the foregoing reasons, Bello does not disclose "each instance having an active condition in which information about the instance is to be modified or an inactive condition in which information about the instance is not to be modified, ... creating a record in a first database table for each of the multiple instances in the active condition, ... deleting from the first table records of instances having values in the one or more fields indicative of the inactive condition; and creating, for records deleted from the first table, a corresponding record in a second database table." Claim 1 is, therefore, in condition for allowance.

Claims 23 and 45 contain limitations that are analogous to the limitations of claim 1 discussed above. Claims 23 and 45 are, therefore, in condition for allowance for at least reasons similar to those discussed above in connection with claim 1.

Colossi does not establish prima facie anticipation of claim 47 because Colossi does not disclose "generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances in the active condition; generating a second OLAP cube by processing an initial collection of database records associated with instances in the inactive condition."

Claim 47 is directed to a method for incrementally generating analysis data for instances of an activity, each instance having an active condition in which information about the instance is to be modified or an inactive condition in which information about the instance is not to be

modified, the method comprising: generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances in the active condition; generating a second OLAP cube by processing an initial collection of database records associated with instances in the inactive condition; and combining the first and second cubes into a virtual OLAP cube.

Colossi is directed to specifying multidimensional calculations for a relational OLAP engine. Page 16 of the office action cites paragraphs 0017, 0018, and 0068 in support of the assertion that Colossi teaches generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances in the active condition. The cited paragraphs, however, discuss multidimensional reports, computation of results before queries are issued, and cube models. The cited paragraphs are silent with respect to database records associated with instances in the active condition. As such, the cited paragraphs of Colossi do not disclose, teach, or suggest generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances in the active condition.

Page 17 of the office action cites paragraphs 0082, 0090, and 0091 in support of the assertion that Colossi teaches generating a second OLAP cube by processing an initial collection of database records associated with instances in the inactive condition. The cited paragraphs, however, discuss cube metadata objects, cube hierarchy metadata objects, and cube model metadata objects. The cited paragraphs are silent with respect to database records associated with instances in the inactive condition. As such, the cited paragraphs of Colossi do not disclose, teach, or suggest generating a second OLAP cube by processing an initial collection of database records associated with instances in the inactive condition.

For at least the foregoing reasons, Colossi does not disclose "generating a first Online Analytical Processing (OLAP) cube by processing an initial collection of database records associated with instances in the active condition; generating a second OLAP cube by processing an initial collection of database records associated with instances in the inactive condition." As such, claim 47 is in condition for allowance.

Claims 2-22, 24-44, 46, and 48-49 are proper dependent claims and are, therefore, in condition for allowance.

Further with respect to claim 2, page 12 of the office action cites column 4, lines 60-64, of Bello in support of the assertion that Bello teaches that no record of the second table is updated after being created. This cited portion of Bello is directed, however, to explaining that a materialized view may contain a summary column containing values generated by aggregating values contained in rows produced by a one-to-many lossless join. As such, Bello does not teach that no record of the second table is updated after being created. Claim 2 is, therefore, in condition for allowance for at least these additional reasons.

Claim 24 contains limitations that are analogous to the limitations of claim 2 discussed above. Claim 24 is, therefore, in condition for allowance for at least reasons similar to those discussed above in connection with claim 2.

Further with respect to claim 3, page 13 of the office action cites column 8, lines 37-40, of Bello in support of the assertion that Bello teaches that the inactive condition corresponds to an instance of the activity being complete. This cited portion of Bello is directed, however, to explaining the three types of sets of joins that are produced by comparing a join graph of a material view with a join graph of a query. As such, Bello does not teach that the inactive condition corresponds to an instance of the activity being complete. Claim 3 is, therefore, in condition for allowance for at least these additional reasons.

Claim 25 contains limitations that are analogous to the limitations of claim 3 discussed above. Claim 25 is, therefore, in condition for allowance for at least reasons similar to those discussed above in connection with claim 3.

CONCLUSION

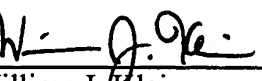
It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, applicant respectfully submits that this application is in condition for allowance, and respectfully requests issuance of a notice of allowance.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: July 21, 2006

By: 

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WJK/ab

PO#	RecvTime	City	Quantity	ShipTime	DeliveryTime
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124	8:30am	Seattle	234	8:45am	1:20pm
125	8:35am	Redmond	87	9:05am	2:30pm
126	8:45am	Seattle	450	9:20am	3:10pm
127	8:55am	Redmond	200	9:30am	<NULL>
128	8:57am	Seattle	340	9:20am	3:05pm
129	9:12am	Seattle	120	9:45am	<NULL>
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FIG. 2
PRIOR ART

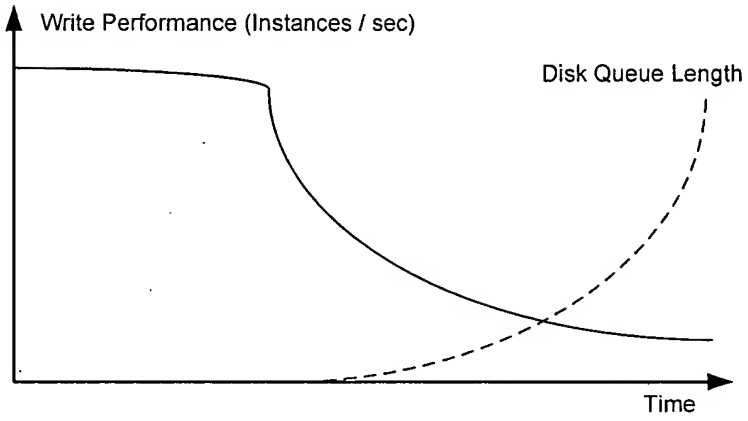

FIG. 3
PRIOR ART

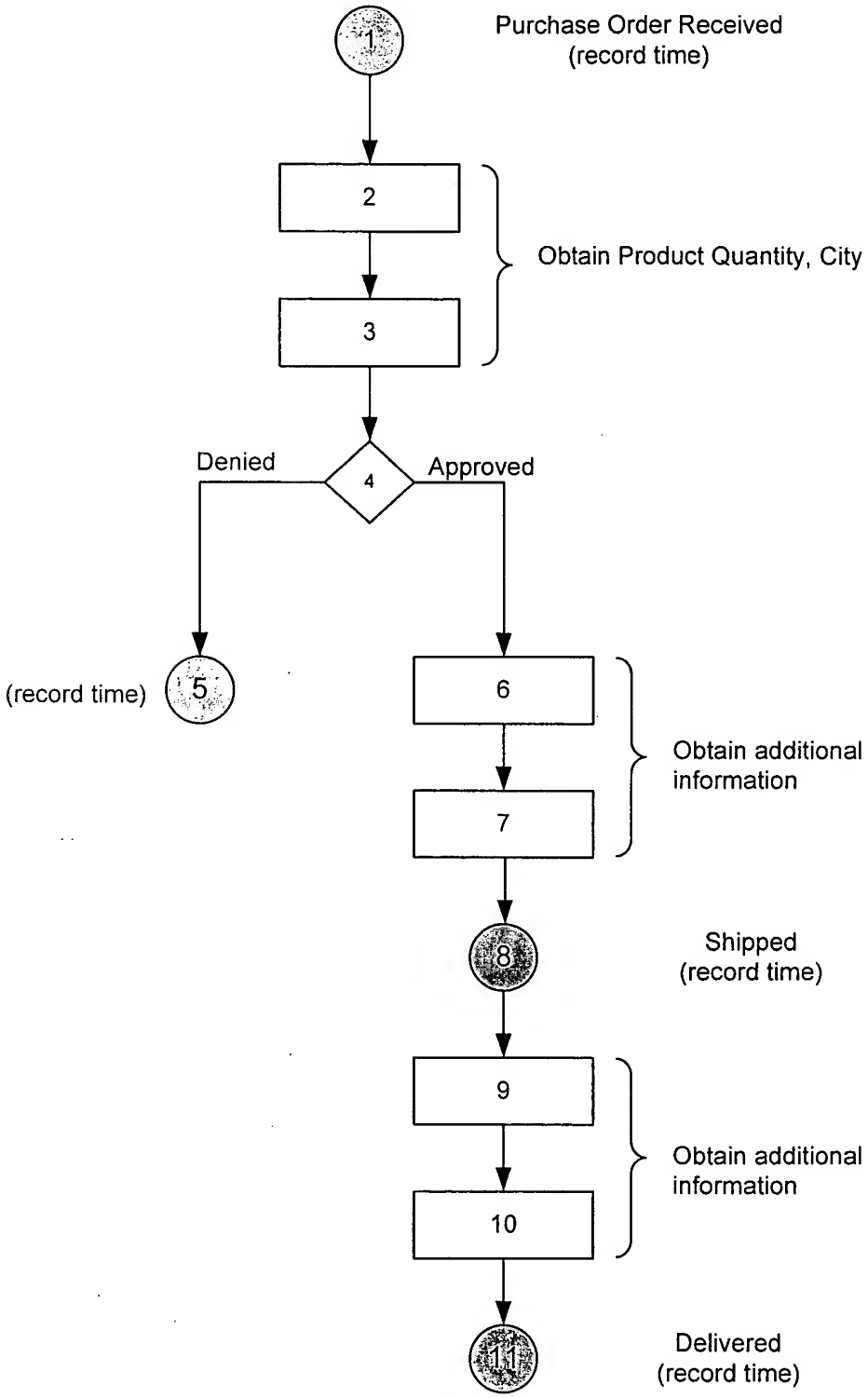

FIG. 1
PRIOR ART

Text added